

- 6.3.2. AD: The *Consultant* shall ensure that biodiversity losses and gains of the likely options are considered based on the approach set out in the Defra Biodiversity Metric 3.0 (or subsequent updates), supporting technical guidance (e.g., Biodiversity Metric 3.0 User Guide and other supporting documents and subsequent updates) and good practice principles (CIEEM)
- 6.3.3. AD: The *Consultant* shall ensure the existing baseline Biodiversity Unit Calculation (BNG baseline assessment) is based on up-to-date surveys, where required, for all habitat areas hedgerows and watercourse length with the potential to be impacted by the likely options.
- 6.3.4. AD: The *Consultant* shall utilise the assessment of baseline Biodiversity Units to inform the short list options appraisal, including the evaluation of alternative solutions and providing the rationale for the selection of the preferred option. The *Consultant* shall agree with the *Client* an appropriate approach for presenting and reporting on this iterative process. The *Consultant* shall set out key implications for BNG for all retained options in the options appraisal report and appraisal summary table (AST).
- 6.3.5. AD: The *Consultant* shall calculate and report on a post development biodiversity unit calculation (BNG post development assessment) utilising the baseline assessment and the identified preferred option. This assessment shall demonstrate the likely change in biodiversity because of the proposed scheme and identify options for habitat retention, enhancement and creation in order to meet planning requirements and the BNG goal of the Sustainability Chapter of the Midlands IDT Annual Plan. The assessment shall demonstrate the rationale for selecting the preferred option with regard to BNG and also securing the best long-term outcomes for biodiversity. The *Consultant* shall ensure the results of the assessment, including recommendations for mitigation and compensation, are taken forward in all relevant environmental deliverables.
- 6.3.6. AD: Where the assessment identifies the need for off-site areas (off-sets), the *Consultant* shall provide appropriate evidence to demonstrate these can realistically meet BNG targets and are proportionate to the project.
- 6.3.7. AD: An initial estimate of the cost of undertaking the BNG works (on-site and any required offsets) shall be provided by the *Consultant*.
- 6.3.8. AD: The *Consultant* shall demonstrate that BNG requirements identified in the assessment are feasible and can be delivered as an integral part of the scheme's construction and operation. Any irreplaceable habitats likely to be impacted by the development must be identified early to inform the design process and subsequent BNG calculations. The *Consultant* shall support the *Client* in obtaining any required landowner agreements.
- 6.3.9. AD: The BNG assessment undertaken for the preferred option shall be produced so that it can be revisited and refined as the design is developed for planning permission, and if required any further detailed design later. The updated assessment shall be utilised to quantitatively demonstrate the measurable percentage increase in Biodiversity Units as a result of scheme design as submitted for planning permission. For this commission, the assessment report must be suitable for submission to the planning authority as part of the planning application.
- 6.3.10. AD: The *Consultant* shall ensure indicative landscape proposals and costings (on-site and any relevant offsets) for the preferred option shall be compatible with utilising the Defra Biodiversity Metric 3.0 (or subsequent updates), including all relevant habitats (terrestrial and aquatic) and their target condition.
- 6.3.11. AD: The *Consultant* shall prepare a monitoring strategy that meets BNG requirements. An estimate of the costs for implementing the monitoring strategy shall be supplied to the *Client*.

6.4. Water Framework Directive

6.4.1. AD: The *Consultant* shall undertake a proportionate Water Framework Directive (WFD) assessment, upon confirmation of the preferred option, to ensure compliance with the regulations and to identify any risks that the developing scheme may pose to WFD objectives. The *Consultant* shall undertake a WFD baseline review, including waterbody definition and understanding WFD mitigation measures; and a WFD screening assessment. (If a WFD scoping assessment or a WFD detailed assessment is required; it will be treated as a Compensation Event)

6.4.2 AD: The *Consultant* shall actively seek opportunities for enhancement to water body status in addition to identifying any mitigation required to make the project compliant.

6.5. Heritage

6.5.1 AD: Prior to the commencement of any historic environment study, the *Consultant* shall prepare a product description for agreement with the *Client*. The *Client* shall provide an outline template for the product description to include, but not limited to a Cultural heritage impact assessment and statement of significance.

6.5.2 AD: The *Consultant* shall establish the historic environment baseline in accordance with the MTR 801_14 SD01 Cultural Heritage and Archaeological Standards. This shall include further desk based research to determine the nature of any non designated heritage assets at the emerging preferred option.

6.5.3. AD: The *Consultant* shall work collaboratively with the *Client* and the *Contractor* to ensure the design and delivery of any ground investigations realises opportunities for integrating archaeologically led data collection and or archaeological monitoring.

6.5.4 AD: The scope for any potential archaeological evaluation to inform the options appraisal shall be informed by the cultural heritage impact assessment and statement of significance, early engagement of the *Client* and be subject to agreement by the *Client*. Archaeological evaluation may not be needed depending upon the emerging preferred option.

6.5.5. AD: The *Consultant* shall support engagement and pre-application discussions with historic environment stakeholders, including the local planning authority archaeology manager. Specific technical documents, drawings and other information required to support the discussions which are not produced as part of the *Consultant's* standard outline design will be managed as a Compensation Event.

6.6. Landscape

6.6.1. AD: Prior to the commencement of any landscape product, the *Consultant* shall prepare a product description for agreement with the *Client*. The *Client* shall provide an outline template for the product description.

6.6.2 AD: The *Consultant* shall review the existing baseline landscape products and notify the *Client* of any gaps and deficiencies requiring additional work so that the product is adequate for the purposes of the options appraisal and assessment of the preferred option. Utilising the existing baseline landscape products, the *Consultant* shall prepare an indicative landscape plan and associated cost estimate for the emerging preferred option at outline design stage in accordance with the MTR 801_14 SD02 Landscape and Environmental Design.

6.6.3 AD: In accordance with MTR 801_14 SD02 Landscape and Environmental Design, the *Consultant* shall produce:

- An Environmental Design Concept Plan;
- Baseline Landscape and Visual Assessment;
- Environmental Site Appraisal Plan;

- ~~Landscape Options Plan;~~
- Indicative Landscape Plan and Indicative Cost Estimate (NB: The ILP should include any mitigation areas required for Biodiversity Net Gain. Liaison between landscape architects and ecologists should be included for as part of the work.)

6.6.4. AD: If and where any existing landscape products have already been produced, these should be taken into consideration and used as a basis for further work if relevant

6.6.5. Further landscape products will be required to proceed to a Full Business Case and to be submitted for local authority planning permission. NEAS Landscape Architects are to confirm the Scope of these products and if required at OBC will be managed with a Compensation Event

6.6.6. The *Consultant* shall update as required the existing baseline landscape and visual appraisal to prepare a Landscape and Visual Impact Assessment (LVIA) for the preferred option in accordance with the MTR 801-14 SD02 Landscape and Environmental Design and capable of supporting the assessment of the preferred option and submission for planning consent.

6.6.7. As with all construction works, care should be taken to minimise the impacts on existing vegetation, following best practice as described in BS 5837: 2012 Trees in relation to design, demolition and construction. This includes employing an arboriculturist to carry out a tree survey to BS5837 at the early stages of the project, followed by an Arboricultural Impact Assessment and Tree Protection Plan when a preferred option is known. As part of the tree survey, Conservation Areas and TPOs should be checked.

6.7. CEEQUAL

6.7.1. AD: The *Consultant* shall provide a qualified CEEQUAL Assessor to undertake the assessment process on the project. The *Consultant's* Assessor shall develop the NEAS CEEQUAL scope to assessment criteria level for agreement with the *Client*. The *Consultant's* Assessor will hold a scoping and evidence start-up workshop with the project team (as a minimum the Project Manager, Senior User, NEAS Environmental Lead, Consultant Environmental Lead). The *Consultant's* Assessor will liaise with the NEAS Programme CEEQUAL Assessor, the NEAS Environmental Project Manager and maintain the evidence tracker. Alongside the assessment, the *Consultant's* Assessor shall be responsible for uploading evidence and including written narrative, to the BRE portal at key project gateways. The *Consultant's* Assessor shall provide supporting information to the Client when handling verifier consultation. The *Consultant's* Assessor will provide quarterly indicative CEEQUAL scores for the project and document these in the OBC report.

6.7.2. AD: The *Consultant's* CEEQUAL Assessor is an integrated member of the project team attending monthly progress meetings, key project workshops including but not limited to options/design and risk, and championing sustainability across the project team.

7. Option Development

7.1. General

- 7.1.1 The *Consultant* shall undertake an options appraisal, which will include a review of the previous work. The *Consultant* shall review the previous work against incoming information to confirm the shortlist identified in the SOC; this does not include re-assessment of longlisted options excluded at SOC stage.
- 7.1.2 The *Consultant* shall review the short list of viable options for the *Client's* approval. On the agreement of the *Client*, the *Consultant* shall assess in detail these options for technical, environmental and economic suitability, as discussed in the relevant sections of this brief, utilising the evidence and data collated as part of this commission.
- 7.1.3 Options appraisal shall include engagement with the ESE contractor on pricing, buildability and maintainability and the *Client* including Field Services and Area FCRM.
- 7.1.4 The *Consultant* shall utilise the results of the carbon appraisal undertaken by the *Client* to analyse and appraise the carbon footprint of options as outlined in Section 11.
- 7.1.5 The *Consultant* shall seek options that support the e:Mission 2030 sustainability targets
- 7.1.6. The *Consultant* shall use outputs from the options development to select a preferred option. The *Consultant* shall facilitate 1 No design workshop (buildability workshop)
- 7.1.7. The *Consultant* shall develop the business case for the preferred option and the outline design including provision of specification, drawings and documentation required for Early Supplier Engagement.
- 7.1.8 The *Client* shall draft the scope for the next stage of the project (OBC-FBC) and the *Consultant* shall support the *Client* to produce the scope.

8. Stakeholder Engagement

8.1. General

8.1.1. The *Consultant* shall take account of the stakeholder engagement plan in accordance with the EA guidance “Working with Others” including agreement of key stakeholders with discussion with the *Client*. The *Consultant* shall ensure that the results from the stakeholder engagement informs the appraisal

~~8.1.2. Monthly/Quarterly circulation of updated communications record at progress meetings.~~

8.1.3. The *Consultant* shall provide technical support and information for input into meetings specified in this section including site plans and typical outline design drawings as prepared for OBC Specific technical documents, drawings and other information required to support this liaison which are not produced as part of the standard OBC scope will be managed as a Compensation Event.

8.1.4 The *Client* will arrange and advertise 1 no public meeting/workshop The *Consultant* shall provide technical support and prepare information for input into the consultation documents including site plans and typical outline design drawings as prepared for OBC for public display

8.1.5 The *Consultant* shall attend 1 no meeting with key external organisations/individuals impacting upon option selection process as arranged by the *Client*. Attendance at these meetings shall include the *Consultant* project manager and environmental lead and other roles as necessary

8.1.6 The *Consultant* shall consider the following and document how they are addressed on this contract:

- Public diversity in engagement and perception of the project team
- Accessibility.
- How inclusive environments are created for the project team.

9. Health and Safety

9.1. General

- 9.1.1. Health, Safety and Wellbeing (HSW) is the number one priority of the *Client*. The *Consultant* shall promote and adopt safe working methods and shall strive to deliver design solutions that provide optimum HSW to all.
- 9.1.2. The *Consultant* shall follow and comply with the requirements outlined in the Safety, health environment and wellbeing (SHEW) Code of Practice (LIT 16559).
- 9.1.3. The *Consultant* shall supply designer risk assessments, drawings and any other data required to fulfil their duties under CDM
- 9.1.4. The works on site included in the geotechnical section will be subject to notification to the HSE. Appraisal work to outline design shall be treated as if it was notifiable.
- ~~9.1.5. AD: The *Consultant* shall fulfil the Principal Designer (PD) role and discharge the duties in accordance with the requirements of regulations 8, 9, 11 and 12 of the Construction Design Management Regulations 2015.~~
- ~~9.1.6. AD: The PD must be a lead or active designer and can either demonstrate relevant Skills, Knowledge and Experience to undertake the role or have access to relevant support to discharge their duties.~~
- ~~9.1.7. AD: The PD will demonstrate their compliance with their CDM duties by preparing and updating the Pre-Construction Management Tool on a monthly basis (or more frequently for start of construction activities) and liaising with the CSF Resident Principal Designer.~~
- ~~9.1.8. AD: The PD will identify and track significant risks, scrutinise the quality of treatment of risks with regards to the principals of prevention, co-ordinate other designers' mitigation and handover designs which can be constructed safely.~~
- ~~9.1.9. AD: The PD shall ensure there is effective liaison and coordination between phases with the Principal Contractor.~~

10. Business Case Submission

10.1.General

- 10.1.1. The *Consultant* shall aggregate all of the work undertaken from this commission into a business case document – the Outline Business Case. The *Client* shall lead on the production of the Commercial, Financial and Management cases. The format of this document and guidance on the contents is detailed in Write a Business Case LIT 55124 ([Link](#)) and the Business Case templates.
- 10.1.2. The *Consultant* shall be responsible for dealing with responses to queries during the approval process and any resubmission required
- 10.1.3. The OBC Delivery is to be in accordance with the *Client's* submission programme for either the National Project Assurance Service (NPAS) or the Large Projects Review Group (LPRG) for projects costing over [REDACTED]. The *Client* shall be kept up to date of progress and submission dates in order that the delivery of this to the review team can be programmed and a place booked at the appropriate review meeting
- 10.1.4. This section of the study shall conclude with the final approval of OBC using latest EA Guidance including all appendices and FSoD approval following submission to NPAS or LPRG

11. Carbon

11.1.General

11.1.1. Carbon emissions shall be identified and assessed on a strategic whole life basis (cost and benefit) in the economic appraisal of options and also as a specific operational target (carbon budget) of the Client.

11 1 2 The carbon budget for the project has been set to 528 Tonnes. The *Consultant* is required to work with the *Client* and the ESE contractor to reduce the project carbon footprint by XX% (define this following review).

11 1 3 The *Consultant* shall work with the *Client* to demonstrate how they have met the corporate requirement for carbon reduction using the Carbon Tool, 'ERIC' and:

- Identifying carbon differentials between alternative solution options at appraisal stage
- Ongoing updates to the carbon calculator and use of the carbon calculator to inform design and construction methodology decisions
- Completion and submission of the carbon calculator and Carbon Optimisation Report at the pre defined stages
- Inclusion of a whole-life carbon appraisal to ensure optimisation of lowest carbon in short-listed and preferred options in OBC.

12. General

12.1.1 No additional requirements further to other sections of this scope

13. Relevant guidance

The *Consultant* shall deliver the *service* using the following guidance:

Ref	Report Name	Where used
LIT 16559	Safety, health environment and wellbeing (SHEW) Code of Practice	Throughout
183_05	Data management for FCRM projects	Mapping and modelling
379_05	Computational Modelling to assess flood and coastal risk	Modelling
LIT 14847	Risk Guidance for Capital Flood Risk Management Projects	Option development
OI 120_16	Whole-life Carbon Planning Tool	Option development
LIT 14284	Whole Life (Construction) Carbon Planning Tool User Guide	Option development
	Access for All Design Guide	Option development
	Project Cost Tool	Costs
LIT 12982	Working with Others: A guide for staff	Consultation & Engagement
Gov.uk	Appraisal Guidance Manual	OBC
672_15_SD03	Business case template 5 case Model	OBC
672_15_SD02	Short Form Business case template	OBC
LIT 4909	Flood and Coastal Erosion Risk Management appraisal guidance (FCERM AG)	OBC
	Flood and Coastal Erosion Risk Management: A Manual for Economic Appraisal (the 'Multi Coloured Manual')	OBC
OI 1334 16	Benefits management Framework	OBC
Gov.uk	Partnership Funding Calculator Guidance	OBC
LIT 15030	The Investment Journey	OBC
LIT 55124	Write a Business Case	OBC
LIT 14953	FCRM Efficiency Reporting capital and Revenue	OBC
LIT 12280	Lessons Log template	OBC
LIT 55096	Integrated Assurance & Approval Strategy	Approvals

14. Requirements of the Programme

14.1. General

14.1.1. The *Consultant* shall provide a detailed programme in Microsoft Project format version 2016 and in pdf format meeting all requirements of Cl 31 of the Conditions of Contract

14.1.2. The *Consultant* shall provide a baseline programme for the project start up meeting and shall update the programme monthly for progress meetings with actual and forecast progress against the baseline. The programme shall also include alignment and submission of the BIM Execution Plan (BEP) and Master Information Delivery Plan (MIDP).

14.1.3 The programme shall cover all the activities and deliverables in the project and include all major project milestones from commencement to the end of the reporting, consultation and approvals stage.

14.1.4. The programme shall include review and consultation periods for drafts, scoping letters, statutory consultation etc.

14.1.5 The programme shall identify time risk allowance on the activities and float.

~~14.1.6. The *Consultant* shall produce a Programme such that the following milestone dates are achieved (examples below, delete if not required):~~

14.1.7. The following are absolute requirements for Completion to be certified:

- Population of the *Client's* latest version of the Project Cost and Carbon Tool, or its successor
 - Transfer to the *Client* of BIM data
 - Clause 11.2(2) work to be done by the Completion Date
-

15. Services and other things provided by the *Client*

15.1.1 Access to Environment Agency systems and resources including:

- Asite.
- FastDraft
- Collaborative Delivery Community SharePoint access

15.1.2 Letter of Appointment of Principal Designer

15.1.3. Site access authorisation letter(s).

15.1.4 Previous studies listed in Section 1.2.1 The *Client* will provide the previous studies within two weeks of contract award.

15.1.5 Add any project specific items

16. Data

16.1.1 Requirements for the handling of project data are covered by the framework schedules

17. *Client's* Advisors

- 17.1.1 The *Client* for the Contract is represented by the Programme & Contract Management (PCM) team, primarily the EA Project Manager, acting as the *Service Manager*, and in their absence the Project Executive. Instructions may only be given by these staff.
- 17.1.2. The *Client* has a number of advisory departments. Instructions will only be deemed enacted from them when they are confirmed by an Instruction from the *Service Manager*. These departments include Asset Performance, Partnership & Strategic Overview, NEAS, etc.
- 17.1.3 The *Client's* organisation has a regulatory function. Communications from the Environment Agency in its capacity as a regulator are not to be confused with communications as the *Client*.
-

18. *Client* Documents the *Consultant* Contributes to

18.1.1 The *Client* maintains several project documents, the *Consultant* is required to contribute to these *Client* owned documents:

- 18.1.2 • Project Risk Register
- 18.1.3. • Project Efficiency CERT Form.
- 18.1.4 • ~~Scheme Lessons Learnt Log~~
- 18.1.5. • Cost and Carbon Tool (CCT).

19. Appendices

20. Appendix 1 – BIM Protocol

The *Consultant* shall adhere to the Environment Agency's Employers Information Requirements (EIR) framework level minimum technical requirements.

All *Client* issued information referenced within the Information Delivery Plan (IDP) requires verifying by the *Consultant* unless it is referenced elsewhere within the Scope.

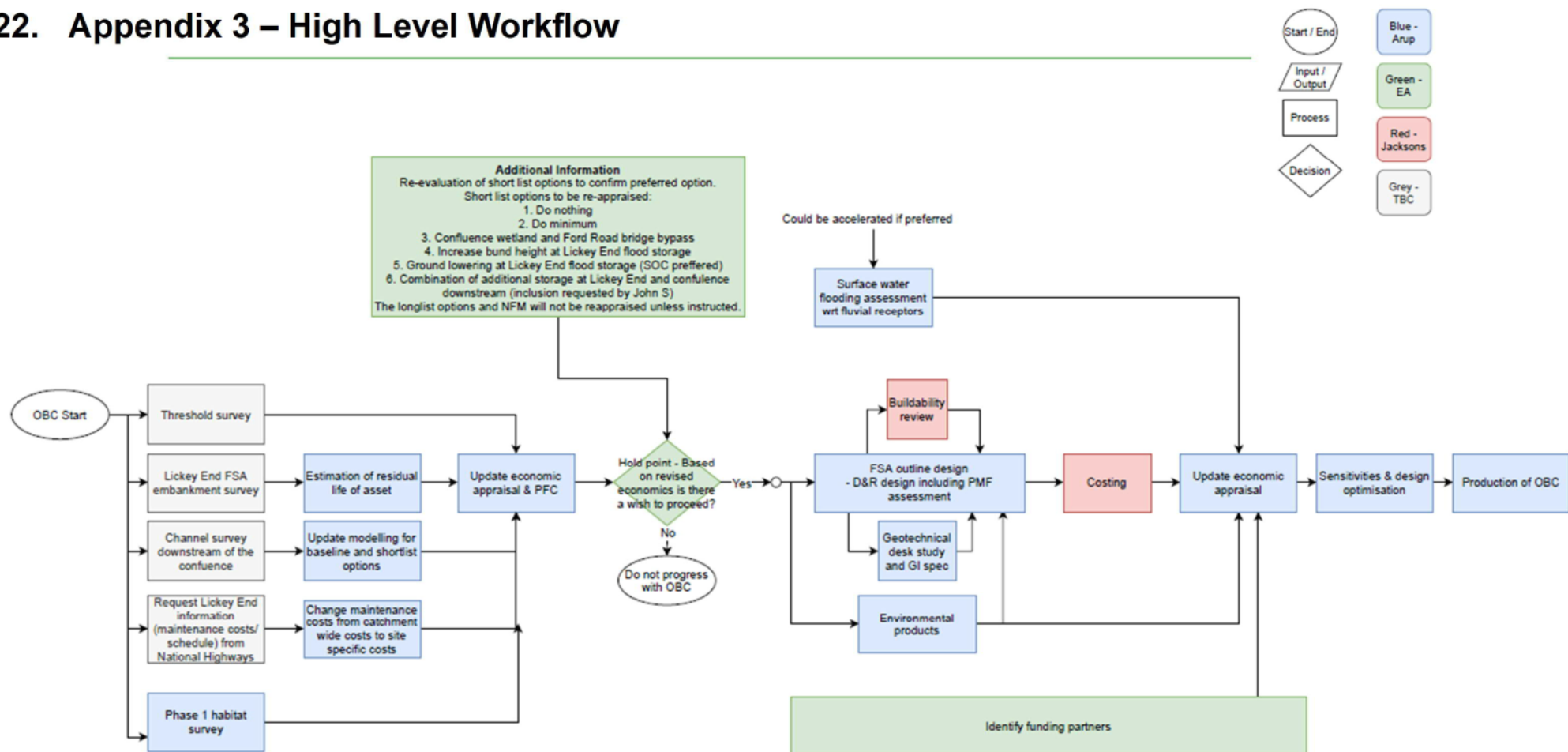
<https://www.asite.com/login/home>

The *Consultant* shall register for an Asite Account and request access to the project workspace to view the IDP

21. Appendix 2 – Modelling Technical Scope

Insert the Modelling Technical Scope created using the Quick Scope Writer, referenced in Section 4

22. Appendix 3 – High Level Workflow



Appendix 4 – Assumptions

- 1 Topo and site walkover will be pre OBC via a CE.
- 2 AD: No Joint Probability Assessment is proposed at OBC stage.
3. Requirements for the handling of project data are covered by the framework schedules.